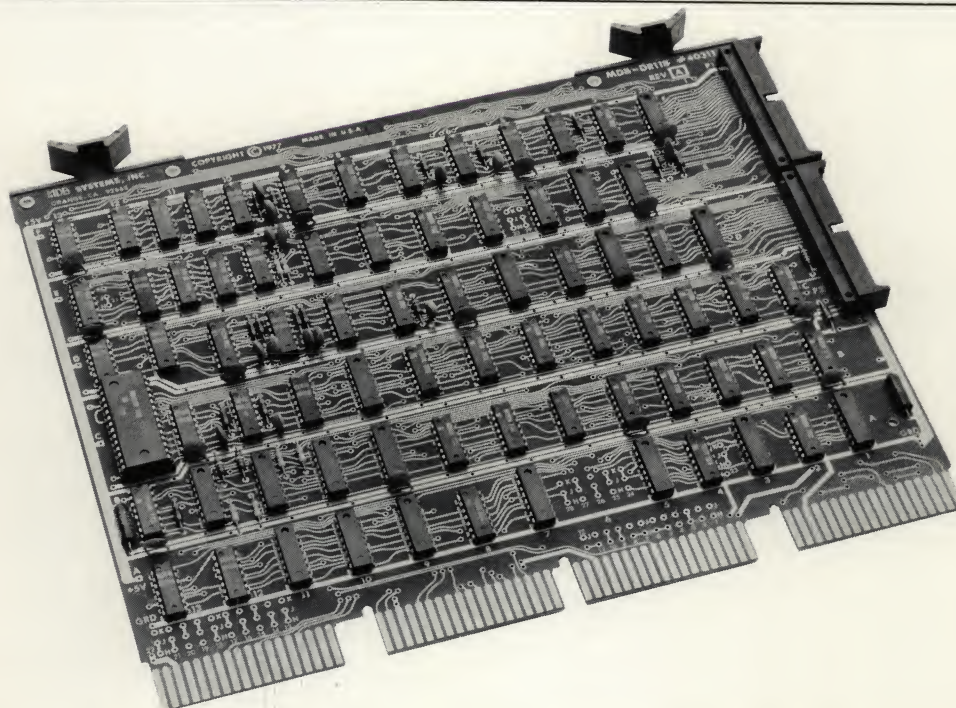


# MDB DR11B

## Direct Memory Access Module



## MDB Direct Memory Access Module for PDP\*-11 Computers

- Bi-directional exchange of 16-bit data from PDP-11 and external device
- Interrupt request and bus master control
- Control and status register
- Address selection
- Output buffer register and input buffer gates
- TTL input and output signals
- Compatible with DEC DR11B operating and diagnostic software
- Electrically plug-compatible with the DEC DR11B

The MDB DR11B direct memory access module controls data transfer between the DEC PDP-11 Unibus\* and user peripheral devices.

The DR11B module contains all necessary hardware for control and status register assignments. The DR11B module is connected by two 40-pin Berg con-

nectors to a peripheral unit. The DR11B module with appropriate software will control the 16-bit data exchange between the Unibus and various peripheral equipment on a direct memory access basis.

Interrupt request, bus master control logic, address selection, and device interface logic comprise the main functional sections of the MDB DR11B.

Four registers consisting of an input and output buffer (16-bit read/write), control/status (16-bit read/write), word count (16-bit read/write), and bus address (18-bit read/write) form the interface logic circuits of the DR11B module. Additional logic allows user selectable addressing across 32K boundaries without an ERROR condition. (Overflow to zero will cause ERROR).

Convenient data exchange between two PDP-11 computers can be achieved by cabling two DR11B modules together using an MDB-M91WW dual wire-

**MDB** 1995 N. Batavia Street  
Orange, California 92665  
714-998-6900  
**SYSTEMS INC.** TWX: 910-593-1339



wrap module to perform similar to the DEC DA11B. Using this method a continuous and dependable exchange of data is accomplished and each module maintains transparency to its host computer.

#### ELECTRICAL REQUIREMENTS:

- +5V at 2.4A

#### ACCESSORIES:

- Optional general purpose cables available
- Dual wire-wrap module MDB-M91WW for custom applications and inter-processor communications.

#### PHYSICAL:

- Occupies 1 quad slot of standard system unit

DR11B Cable Connector Pin Assignments

Connector P1		Connector P2	
Pin	Signal	Pin	Signal
1	DATI15	1	ODAT15
2	DATI00	2	ODAT00
3	DATI14	3	ODAT14
4	DATI01	4	ODAT01
5	DATI13	5	ODAT13
6	DATI02	6	ODAT02
7	DATI12	7	ODAT12
8	DATI03	8	ODAT03
9	DATI11	9	ODAT11
10	DATI04	10	ODAT04
11	DATI10	11	ODAT10
12	DATI05	12	ODAT05
13	DATI09	13	ODAT09
14	DATI06	14	ODAT06
15	DATI10	15	ODAT10
16	DATI07	16	ODAT07
17	C0 CONTROL IN	17	GND
18	A00IN	18	GND
19	ATTN	19	INIT0
20	GND	20	GND
21	BA INC ENB	21	WC INC ENB
22	GND	22	GND
23	no connection	23	READY0
24	GND	24	GND
25	BUSY0	25	470 OHMS TO +5V DC
26	GND	26	GND
27	C1 CONTROL IN	27	FNCT10
28	GND	28	NO LOCK
29	DSTATC	29	FNCT10
30	GND	30	GND
31	DSTATB	31	FNCT20
32	GND	32	GND
33	SINGLE CYCLE	33	FNCT30
34	GND	34	GND
35	DSTATA	35	FNCT30
36	GND	36	GND
37	GO0	37	CYCLE REQ B
38	GND	38	GND
39	CYCLE REQ A	39	END CYCLE 0
40	GND	40	GND